**Timing Chart**

**A computer screen shot of a green line

Description automatically generated**

**Lab6.v**

A screen shot of a computer program

Description automatically generated

**Lab6\_tb.v**

**A screenshot of a computer program

Description automatically generated**

**TCL Console**

Select: 000

A: 1010

B: 0110

Cin: 1

Out: 0001

Cout: 1

----------------------------------------------------

Select: 001

A: 1010

B: 0110

Cin: 1

Out: 0011

Cout: 0

----------------------------------------------------

Select: 001

A: 1010

B: 0110

Cin: 1

Out: 0011

Cout: 0

Select: 010

A: 1010

B: 0110

Cin: 1

Out: 1110

Cout: 0

----------------------------------------------------

Select: 010

A: 1010

B: 0110

Cin: 1

Out: 1110

Cout: 0

Select: 011

A: 1010

B: 0110

Cin: 1

Out: 0010

Cout: 0

----------------------------------------------------

Select: 011

A: 1010

B: 0110

Cin: 1

Out: 0010

Cout: 0

Select: 100

A: 1010

B: 0110

Cin: 1

Out: 0100

Cout: 1

----------------------------------------------------

Select: 100

A: 1010

B: 0110

Cin: 1

Out: 0100

Cout: 1

Select: 101

A: 1010

B: 0110

Cin: 1

Out: 0101

Cout: 0

----------------------------------------------------

Select: 101

A: 1010

B: 0110

Cin: 1

Out: 0101

Cout: 0

Select: 110

A: 1010

B: 0110

Cin: 1

Out: 0000

Cout: 0

----------------------------------------------------

Select: 110

A: 1010

B: 0110

Cin: 1

Out: 0000

Cout: 0

Select: 111

A: 1010

B: 0110

Cin: 1

Out: 0000

Cout: 0

----------------------------------------------------

Select: 111

A: 1010

B: 0110

Cin: 1

Out: 0000

Cout: 0